

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/522,793	01/31/2005	Koichi Kinoshita	040894-7172 4671		
	7590 12/31/2007		EXAMINER		
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW			KING, BR	KING, BRADLEY T	
WASHINGTON, DC 20004			ART UNIT	PAPER NUMBER	
			3683		
			<u></u>		
			MAIL DATE	DELIVERY MODE	
		·	12/31/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No		Applicant(s)	_			
Office Action Summary			'-					
		10/522,793		KINOSHITA ET AL.				
		Examiner		Art Unit				
		Bradley T. King		3683				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS C 36(a). In no event, ho will apply and will expir	COMMUNICATION wever, may a reply be tire e SIX (6) MONTHS from to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status				•				
1)⊠	1) Responsive to communication(s) filed on <u>18 October 2007</u> .							
2a)	This action is FINAL . 2b)⊠ This action is non-final.							
3)[
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)⊠	Claim(s) 1-19 is/are pending in the application							
.,2	4a) Of the above claim(s) <u>4,7,15,17 and 18</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-3,5,6,8-14,16 and 19</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/o	or election requi	ement.					
Applicat	ion Papers							
1	The specification is objected to by the Examine	er.		•				
10)	The drawing(s) filed on is/are: a) acc	epted or b) 🗌 c	bjected to by the	Examiner.				
",	Applicant may not request that any objection to the	drawing(s) be he	ld in abeyance. Se	ee 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority	under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachme	nt(s)							
1) 🔲 Not	ice of References Cited (PTO-892)	4) [Interview Summar	ry (PTO-413)				
	ice of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO/SB/08)	51	Paper No(s)/Mail [Notice of Informal					
	er No(s)/Mail Date	6)	Other:					

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5-6, 9-10, 13-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US# 5975252) in view of Matsumoto et al (US# 6116384).

Suzuki et al disclose a brake including; a support member 2 fixed to a vehicle body and disposed adjacent to a rotor which rotates together with a wheel; a pair of pads 10 and 15 supported by the support member on both sides of the rotor slidably in an axial direction thereof; a caliper 5 supported displaceably in the axial direction of the

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rotor, the caliper being supported by a plurality of guide holes provided in the support member and a plurality of guide pins 8 respectively fitted in the guide holes; a claw portion 5c provided on one side of a bridge portion 5b of the caliper, the bridge portion straddling the rotor; and a piston 9 provided on another side thereof, wherein the pair of pads are pressed against both side surfaces of the rotor in consequence of the extension of the piston so as to effect braking, pressed-side shim plates 14 and 17 are respectively retained by those surfaces of back plates of the pair of pads which are located away from a rotor side, pressing-side shim plates 13 and 18 are respectively retained by pressing sides of the claw portion and the piston, and each of the pressedside shim plates and each of the pressing-side shim plates are slidably abutted against each other. Suzuki lacks the disclosure of the pressed-side shim plates being fixed to the retaining surfaces. Matsumoto discloses a similar brake arrangement and further teaches the use of claws to retain pressed-side shim plates. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fix the press-side plates of Suzuki et al, as taught by Matsumoto, to ensure proper brake release without excessive play.

Regarding claims 2 and 10, note lower pin in figure 2 has a series of alternating first and second diameters at its end.

Regarding claims 5 and 13, the shapes are trapezoids.

Regarding claims 6 and 14, the shapes are integral.

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Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US# 5975252) and Matsumoto et al (US# 6116384), as applied to claim 1 above, in further view of Tribuzio et al (US# 5562187).

Suzuki et al and Matsumoto et al discloses all the limitations of the instant claims with exception to the disclosure of two pins having enlarged diameters at intermediary portions. Tribuzio et al discloses a similar brake caliper and further teaches the use of pins having enlarged diameters to provide elasticity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize pins such as taught by Tribuzio et al in the brake of Suzuki et al to provide elasticity to the pin assembly, thereby reducing stresses to potential damage to the guide pins.

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US# 5975252) and Matsumoto et al (US# 6116384), as applied to claim 1 above, in further view of in view of JP 1-224530.

Suzuki et al and Matsumoto disclose all the limitations of the instant claims with exception to the disclosure of elastic rings on each side of the guide pin. JP 1-224530 discloses a similar brake and further teaches rings to reduce torque fluctuations and vibrations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize rings at the ends of the guide pins of Suzuki et al as taught by JP 1-224530 to reduce torque fluctuations and vibrations, thereby reducing noise and increasing user comfort.

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Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Bradley T King Primary Examiner Art Unit 3683

BTK